What is claimed is:

1. A non-woven binder composition, comprising an aqueous solution of a copolymer binder comprising:
    a) at least one acid functional monomer unit; and
    b) at least one hydroxyl, amide, or amine monomer unit.
2. The binder composition of claim 1 wherein said copolymer binder comprises:
    a) from 1 to 99 mole percent of said acid functional monomer unit; and
    b) from 1-75 mole percent of said amide, amine or hydroxyl functional monomer unit.
3. The binder composition of claim 1 wherein said copolymer binder comprises from 50 to 95 mole percent of said acid functional monomer.
4. The binder composition of claim 1 wherein said acid functional monomer is selected from the group consisting of a carboxylic acid monomer, a phosphonic acid monomer, a sulfonic acid monomer, or a mixture thereof.
5. The binder composition of claim 4 wherein said carboxylic acid monomer comprises acrylic acid, methacrylic acid, maleic acid or a mixture thereof.
6. The binder composition of claim 1 wherein said hydroxyl, amide, or amine monomer unit comprises a sulfobetaine or carboxybetaine.
7. The binder composition of claim 1 wherein said copolymer binder comprises 10 to 20 mole percent of said amine, amide, or hydroxyl functional monomer.
8. The binder composition of claim 1 wherein said copolymer binder comprises the acid functional monomer and amine or hydroxyl functional monomer in a mole ratio of from 100:1 to 1:1.
9. The binder composition of claim 1 wherein said copolymer binder further comprises up to 50 mole percent of non-functional ethylenically unsaturated monomer units.
10. The binder composition of claim 1, wherein said copolymer binder has a molecular weight of from 1,000 to 300,000.
11. The binder composition of claim 1 wherein said binder composition further comprises from 0 to 25 weight percent of at least one catalyst, based on the weight of the copolymer binder.
12. A binder composition comprising an aqueous solution comprising::
    a) a poly copolymer binder comprising at least one acid functional monomer unit; and
    b) a polyamine or amide-amine crosslinking agent.

13. The binder composition of claim 12 wherein said polyamine or amide-amine crosslinking agent contains no hydroxy groups.

14. The binder composition of claim 12 wherein said crosslinking agent is selected from the group consisting of diethylenetriamine, tetraethylenepentamine, polyathyleneimine, and mixtures thereof.

15. A bonded non-woven mat comprising an a fibrous substrate having directly deposited thereon a copolymer binder, wherein said copolymer binder comprises:

a) at least one acid functional monomer unit; and

b) at least one hydroxyl, amide, or amine functional monomer unit.